

ATTACHMENT 5 INSPECTION SCHEDULE

5.1 INSPECTIONS [40 CFR 264.15, 264.602; R315-8-2.6; R315-8-16]

This section addresses the inspection schedule for Munitions Management Device, Version 1 (MMD-1), emergency and safety equipment available for MMD-1 operations, monitoring equipment, and operating and structural equipment to be used during MMD-1 operations, including the U.S. Army Dugway Proving Ground (DPG) Building 3445. Inspections will prevent malfunctions and detect deterioration, human errors, and releases that may cause or lead to the release of hazardous waste to the environment or pose a threat to human health.

During MMD-1 operations, periodic inspections will be conducted as described in **Table 5-1**, Inspection Schedule. Those inspections conducted will be either specific to Building 3445 or will focus on the MMD-1 system. Any deficiencies noted during inspections will be documented, and corrective actions will be initiated and tracked to completion. MMD-1 inspected items will include process and chemical agent and industrial chemical monitoring systems, reagent and water supplies, operational and structural components, emergency response equipment, security, unpack area, waste storage areas, and other items relevant to human health and environmental protection. Inspection of Building 3445, which will house the MMD-1, will include security, closed-circuit television (CCTV), safety and emergency equipment, communications systems, chemical agent and industrial chemical monitoring systems, building structural integrity, and electrical systems.

Inspections of the MMD-1 and support utility equipment will be conducted by MMD-1 operators, and inspections of Building 3445 will be conducted by DPG Building 3445 operators. All inspections will be recorded on log sheets. Examples of inspection log sheets for the MMD-1 are provided in **Appendix 5A**. Examples of Building 3445 inspection log sheets are provided in **Appendix 5B**.

Table 5-1. Inspection Schedule

Inspection Item 264.15; R315-8-2.6	Frequency 264.15 (b)(4); R315-8-2.6	Type of Problem 264.15(b)(3); R315-8-2.6	Location
<u>SECURITY CONTROLS</u>			
Warning Signs	W	<ul style="list-style-type: none"> missing or damaged signs are illegible signs out of place 	Perimeter of Building 3445; Munition Service Magazine
Outside Lights	W	<ul style="list-style-type: none"> incorrect position; bulbs not functional 	Perimeter of Building 3445
Fences	W	<ul style="list-style-type: none"> broken or down fence lines, loose wires infusion or obstruction by vegetation 	Perimeter of Building 3445
Closed Circuit Television (CCTV) Cameras	D (when performing MMD-1 operations)	<ul style="list-style-type: none"> impaired visual clarity; incorrect position; incorrect operation 	Perimeter and interior of Building 3445; interior of MMD-1 process trailer
Gates	W	<ul style="list-style-type: none"> integrity; signs of tampering unable to safely close gate 	Perimeter of Building 3445
Locks	W	<ul style="list-style-type: none"> lock not secured; signs of tampering not in working order, unable to lock 	Building 3445; Munition Service Magazine
<u>AREA</u>			
Loading and Unloading Area	D (when performing CWM or waste transport)	<ul style="list-style-type: none"> signs of spills, soil discoloration 	Building 3445, Munition Service Magazine
Periphery	D (when performing CWM or waste transport)	<ul style="list-style-type: none"> signs of spills, soil discoloration, or stressed vegetation 	Within Building 3445 fence line and vicinity
<u>SAFETY AND EMERGENCY EQUIPMENT</u>			
Type ABC Fire Extinguishers (2)	M	<ul style="list-style-type: none"> poor condition; not fully charged; no inspection tag 	Building 3445 and control trailer
Fire Suppression System	M	<ul style="list-style-type: none"> weights and pressures of the FM-200 cylinder impaired 	Process trailer
Emergency Showers (1)	W	<ul style="list-style-type: none"> not functioning properly 	Building 3445
Eyewash Stations (2)	W	<ul style="list-style-type: none"> not functioning properly; no water available 	Building 3445
Ambulance	W (when performing MMD-1 operations)	<ul style="list-style-type: none"> vehicle not operating; medical supplies including Mark I kits, trauma kits, and stretcher not present 	Building 3445 parking lot
Grounding Rod (1)	M	<ul style="list-style-type: none"> not present or improper installation 	Control trailer
Backup Generator System	D (when performing MMD-1 operations)	<ul style="list-style-type: none"> unacceptable standby generator settings not functioning properly 	Building 3445
Intercom Systems	D (when performing MMD-1 operations)	<ul style="list-style-type: none"> not functioning properly 	Building 3445 control room, MMD-1 control trailer, other support trailers

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Inspection Item264.15; R315-8-2.6	Frequency264.15 (b)(4); R315-8-2.6	Type of Problem 264.15(b)(3); R315-8-2.6	Location
Two-way Radios	D	• not functioning properly	Building 3445 loading areas; UPA and main test chamber
Personnel Decontamination Station (2)	W	• insufficient inventory; lapsed expiration dates (where applicable)	Personnel decontamination station in Building 3445
Personal Protective Equipment	W	• insufficient inventory	Personal Protective Equipment Storage
Dedicated Spill Kit (1)	W	• insufficient inventory and accessibility	Building 3445, East Chamber
<u>MMD-1 MONITORING EQUIPMENT</u>			
Depot Area Air Monitoring System (DAAMS)	D (when performing MMD-1 operations)	• physical integrity of monitor and associated equipment (transfer lines, sequencer, etc.) impaired; signs of damage; equipment not calibrated.	Building 3445, East Chamber, and Munition Service Magazine
Near Real-Time Gas Chromatographs, for example, MINICAMS ⁷	D (when performing MMD-1 operations)	• physical integrity of monitor and associated equipment (transfer lines, etc.) impaired; signs of damage or malfunction of monitors and associated equipment; equipment not calibrated; not functioning properly.	Building 3445, East Chamber, UPA, MMD-1, process trailer, and Munition Service Magazine
GC/MS Processor	D (when performing MMD-1 operations)	• not operating properly; tuning procedure not conducted; gas supplies insufficient	Process trailer, UPA, MMD-1 (MTV, LRV, carbon filtration system)
Colorimetric Detection Tubes	W (when performing MMD-1 operations)	• insufficient inventory; deterioration or cracks in tubes; damage or malfunction; expiration date exceeded.	Detection tubes kept at Mobil Chemical Laboratory and/or supply trailer
<u>OPERATING AND STRUCTURAL EQUIPMENT</u>			
Unpack Area	D (when performing MMD operations)	• accumulation of liquids in area or on equipment • waste handling equipment not operable or in poor condition	Building 3445, East Chamber
<u>MMD-1</u>			
Munition Loading and Breaching System • Hydraulic system • MTV tools, saws	D (prior to MMD-1 operations)	• integrity impaired; signs of damage	MMD-1 process trailer in Building 3445, East Chamber
Reagent Processing • Reagent storage tanks • Reagent charge tank • Reagent fill pumps • Piping	D (prior to MMD-1 operations)	• integrity impaired; signs of damage to tanks, pipes, or pumps; inspect for spills or leaks; inspect secondary containment pan for accumulated liquids, cracks, gaps, other visible damage	Building 3445, East Chamber process trailer
Liquid Processing • MTV • LRV	D (prior to MMD-1 operations)	• integrity impaired; signs of damage to vessels, pipes, or pumps; inspect for spills or leaks	Building 3445, East Chamber, process trailer

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Inspection Item 264.15; R315-8-2.6	Frequency 264.15 (b)(4); R315-8-2.6	Type of Problem 264.15(b)(3); R315-8-2.6	Location
<ul style="list-style-type: none"> Recirculation pumps Agent injection pumps Piping 			
Liquid Waste System <ul style="list-style-type: none"> Surge tanks Waste transfer pump Piping Secondary containment pans for surge tanks 	D (prior to MMD-1 operations)	<ul style="list-style-type: none"> integrity impaired; signs of damage to vessels, pipes, or pumps; inspect for spills or leaks; inspect secondary containment pan for accumulated liquids, cracks, gaps, other visible damage 	Building 3445 process trailer
Gas Processing <ul style="list-style-type: none"> Gas reactor Process gas vacuum pump Gas reactor cooler Gas reactor knockout drum Waste gas knockout drum Waste gas chiller Waste gas heater 	D (prior to MMD-1 operations)	<ul style="list-style-type: none"> integrity impaired; signs of damage to vessels, pipes, or pumps; inspect for spills or leaks 	Building 3445, East Chamber, process trailer
Waste Gas System <ul style="list-style-type: none"> Carbon adsorption unit 	D (prior to MMD-1 operations)	<ul style="list-style-type: none"> integrity impaired; signs of damage to vessels, pipes, or pumps; inspect for spills or leaks 	Building 3445, East Chamber, process trailer
Relief System <ul style="list-style-type: none"> Relief vent tank Piping 	D (prior to MMD-1 operations)	<ul style="list-style-type: none"> integrity impaired; signs of damage to vessels, pipes, or pumps; inspect for spills or leaks 	Building 3445, East Chamber, process trailer
Closed Circuit Television (CCTV) System	D (prior to MMD-1 operations)	<ul style="list-style-type: none"> impaired visual clarity; incorrect position; incorrect operation 	Building 3445 East Chamber; control trailer
Digital Control and Instrumentation System	D (prior to MMD-1 operations)	<ul style="list-style-type: none"> physical integrity of system impaired; not operating properly 	Control trailer, Building 3445 East Chamber, and process trailer
Electrical Systems <ul style="list-style-type: none"> Primary power UPS Backup generator 	D (prior to MMD-1 operations)	<ul style="list-style-type: none"> physical integrity of system impaired; not operating properly. 	Control trailer, Building 3445, East Chamber, process trailer
MMD-1 System Secondary Containment <ul style="list-style-type: none"> Spill-containment structures Trailer sump Trailer sump pump 	D (prior to MMD-1 operations)	<ul style="list-style-type: none"> integrity impaired signs of spills or leaks 	MMD-1 process trailer in Building 3445, East Chamber
Carbon Filter Systems <ul style="list-style-type: none"> induced draft filter fan motor filter elements pressure gauges induced draft filter fan 	D (when performing MMD-1 operations)	<ul style="list-style-type: none"> signs of corrosion, malfunctions, leaks, or excessive wear; pressure drop on gauges; improper operation of fan motor 	UPA, MMD-1 process trailer in Building 3445, East Chamber, Munition Service Magazine

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Inspection Item264.15; R315-8-2.6	Frequency264.15 (b)(4); R315-8-2.6	Type of Problem 264.15(b)(3); R315-8-2.6	Location
CWM Storage Area	W	<ul style="list-style-type: none"> Waste inventory not known; presence of accumulated liquids; leaking munitions; structural integrity of overpack impaired (i.e., paint peeling, blistering, other abnormal conditions); overpack containers are not closed; storage of containers are not in upright position and not elevated above free liquid accumulation point; pallet structural integrity impaired 	Munition Service Magazine
Waste Storage (<90 day) Areas	W	<ul style="list-style-type: none"> Waste inventory not known; presence of accumulated liquids; container leaks, bulges, or other damage; secondary containment pans or structures have cracks, gaps, or other damage; spill kits not present, or insufficient inventory; labels not legible or present; accumulation start date not present; date on container exceeds 90-day storage limit 	Building 3445 West Chamber, UPA, Street A waste storage area

NOTES:

CWM = chemical warfare materiel

D = daily

LRV = liquid reactor vessel

M = monthly

MTV = munitions treatment vessel

UPA = unpack area

W = weekly

5.2 GENERAL INSPECTION REQUIREMENTS [40 CFR 264.15(a), (b), 264.33; R315-8-2.6; R315-8-3.4]

The MMD-1 inspection schedule, provided in **Table 5-1**, specifies the items to be inspected, the frequency of inspections, and the types of problems that will be looked for. Inspection items and inspection schedules for Building 3445, the building that will house the MMD-1 during testing, are presented in **Appendix 5B**.

5.3 TYPES OF PROBLEMS [40 CFR 264.15(b)(3); R315-8-2.6]

The types of problems that will be looked for during inspection of the MMD-1 will include: integrity of the equipment to discover signs of damage; spills or leaks from pipes, vessels, containers, or pumps; and impaired or improper operation of the CCTV system, communications systems, and digital control and instrumentation system. The types of problems to be inspected for Building 3445 will include structural integrity, impaired or improperly operated electrical and communications systems or monitoring systems, and the integrity of emergency response equipment. The types of problems to be inspected for Building 3445 are presented in **Appendix 5B**.

5.4 FREQUENCY OF INSPECTION [40 CFR 264.15(b)(4); R315-8-2.6]

The inspection frequency presented for items associated with the MMD-1 system is based on regulatory compliance requirements, the rate of possible deterioration, and the possibility of an environmental or human health incident if deterioration, malfunction, or operator error goes unnoticed between inspections. The frequency of inspection for Building 3445 items is listed in daily and weekly inspection checklists presented in **Appendix 5B**.

5.5 SPECIFIC PROCESS INSPECTION REQUIREMENTS

MMD-1 process equipment systems and support utility systems will be inspected for damage and for impaired or improper operations prior to first use each working day. The inspection schedule and types of problems that will be looked for during the MMD-1-specific process inspection are listed in **Table 5-1**.